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Claims

1. A method for handling digitally stored sound sequences (7D)
   such as MOH (= Music on Hold), voice sequences or signal
5   tones in a telecommunications system (2) having a CPU
   (2.3.1), a working memory (2.1) for the CPU (2.3.1) and a
   switching network (2.2), with a program code and/or data of
   telecommunications subscribers being preferably stored in
   the working memory (2.1), the telecommunications system (2)
10   establishes connections to terminals (3.1 - 3.n) via the
   switching network (2.2) and outputs sound sequences (7D) via
   the switching network (2.2) to at least one
   telecommunications terminal (3.1 - 3.n),
   w h e r e i n
15   at least a part of the working memory (2.1) is used to store
   the digitally stored sound sequences (7D).

2. The method as claimed in the preceding claim 1,
   w h e r e i n
20   the CPU (2.3.1) performs a data transfer (4) of the
   digitally stored sound sequences (7D) between working memory
   (2.1) and switching network (2.2).

3. The method as claimed in one of the preceding claims 1 and 2,
25   w h e r e i n
   the data is transferred packet by packet and a TSA (2.3.3)
   is used between working memory (2.1) and switching network
   (2.2) in order to assign the digitally stored sound
   sequences (7D) to programmed timeslots.

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4. The method as claimed in the preceding claim 3,
   w h e r e i n
   a FIFO shift register is used in the TSA (2.3.3) in order to
   support the packet-by-packet data transfer of the digitally
5 stored sound sequences (7D).

5. The method as claimed in one of the preceding claims 1 to 4,
   w h e r e i n
   in order to offload the CPU (2.3.1) at least one
10 microcontroller (2.3), in particular a DMA controller
   (2.3.4), is used between working memory (2.1) and TSA
   (2.3.3), which microcontroller is initialized by the CPU
   (2.3.1) in order to perform the transfer of the digitally
   stored sound sequences (7D).
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6. The method as claimed in the preceding claim 5,
   w h e r e i n
   the CPU (2.3.1) requests the microcontroller (2.3, 2.3.4) to
   set the start address of the digitally stored sound
20 sequences (7D) in the working memory (2.1) and to set the
   destination address in the FIFO shift register of the TSA
   (2.3. 3) in order to play back the digitally stored sound
   sequences (7D).

25 7. The method as claimed in one of the preceding claims 5 and 6,
   w h e r e i n
   the CPU (2.3.1) requests the microcontroller (2.3, 2.3.4) to
   set the start address of the digitally stored sound
   sequences (7D) in the FIFO shift register of the TSA (2.3.3)
30 and to set the destination address in the working memory
   (2.1) in order to record sound sequences.

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8. The method as claimed in one of the preceding claims 1 to 7,
   w h e r e i n
   the telecommunications system (2) digitizes sound sequences
5 (7D) and stores them in the working memory (2.1).

9. The method as claimed in one of the preceding claims 1 to 8,
   w h e r e i n
   at a certain filling level of the FIFO shift register, the
10 TSA (2.3.3) requests the CPU (2.3.1) by means of an
   interrupt command (6) to start or to stop a new data
   transfer (4).

10. The method as claimed in the preceding claim 5 to 9,
15 w h e r e i n
   a CPU with integrated PECC (= Peripheral Exchange Control)
   transfer feature is used instead of the microcontroller
   (2.3, 2.3.4) for the transfer (4) of the digitally stored
   sound sequences (7D) between working memory (2.1) and TSA
20 (2.3.3).

11. A telecommunications system (2) having a CPU (2.3.1), a
   working memory (2.1) for the CPU (2.3.1) and a switching
   network (2.2),
25 w h e r e i n
   means, preferably program means or program modules, are
   provided which perform the method as claimed in the
   aforementioned method claims 1 to 10.